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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/715,131	11/20/2000	James Thomas Edward McDonnell	1509-135	6368

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HEWLETT PACKARD COMPANY
P O BOX 272400, 3404 E. HARMONY ROAD
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER

IQBAL, KHAWAR

ART UNIT PAPER NUMBER

2686

DATE MAILED: 04/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/715,131

Applicant(s)

MCDONNELL ET AL.

Examiner

Khawar Iqbal

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 31,33,35-47,52-56,60,61,63 and 67-78 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 31,33,35-47,52-56,60,61,63 and 67-78 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claim 31 recites the limitation "the first, lower bandwidth" in page 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 52-56,59,68,70-78 are rejected under 35 U.S.C. 102(e) as being unpatentable by Rautila (20040171378).

Regarding claim 52 Rautila teaches a method of data transfer by using first and second communication links of differing bandwidths between a network and a mobile device, the first link having a narrower bandwidth than the second link, the method comprising (fig. 1): entering data into the mobile device (para. # 0024-0025, 0030-0032); notifying the network of data awaiting transfer thereto from the mobile device by transmitting a first signal from the device to the network via the first link (para. # 0024-0025, 0030-0032); and then transferring the data from the mobile device to the network by transmitting a second signal from the device to the network via the second link (para. # 0024-0025, 0030-0032).

3. Regarding claim 53 Rautila teaches a data transfer system comprising (fig. 1): a network, a mobile device (10), a first transmitter and a second transmitter, the network being adapted to contain data, the mobile device being adapted to receive signals from both the first and second transmitters (para. # 0024-0025, 0030-0032), the first transmitter being adapted to transmit a first narrow bandwidth long range signal (mobile network 80) to the mobile device via a first narrow bandwidth long range channel, the first signal indicating data on the network are available to be transferred to the mobile device (para. # 0024-0025, 0030-0032), the second transmitter being adapted to transmit to the mobile device via a second wide bandwidth short-range channel (hotspot network), a second wide bandwidth short range signal including the data, device and the first transmitter being arranged for selectively causing the first transmitter to transmit the data via the first channel and enabling the mobile device to selectively receive the data via the first and second channels (para. # 0024-0025, 0030-0032).

Regarding claim 54 Rautila teaches wherein the first transmitter is arranged to operate at a frequency within the range selected from group (i) about 900 MHz to about 1900 MHz; (ii) about the 2 GHz band (para. # 0024-0025, 0030-0032).

Regarding claim 55 Rautila teaches wherein the second transmitter is arranged to operate at a frequency within the range of the order of 1 GHz to the order of a few tens of GHz (para. # 0024-0025, 0030-0032).

Regarding claims 56, 59 Rautila teaches the second transmitter includes a wireless LAN base station (cellular and hotspot) (para. # 0024-0025, 0030-0032).

Regarding claims 70-72 Rautila teaches (para. # 0024-0025, 0030-0032).

Regarding claim 73 Rautila teaches a method of data transfer between a mobile device and a communications network via a first narrow bandwidth long-range channel the network including plural second wideband width short-range channels at different locations, the method comprising (fig. 1):

transferring a message to the device from the network via the first channel, the message indicating that data desired to be transferred to the device (para. # 0024-0025, 0030-0032);

selectively transmitting the data via the first channel(para. # 0024-0025, 0030-0032); and

selectively receiving the data at the mobile device via the first and second channels (para. # 0024-0025, 0030-0032).

Regarding claim 74 Rautila teaches providing a user of the mobile device with an indication of at least one of the different locations, and performing the selective data-receiving step based on the indication of the at least one location (para. # 0024-0025, 0030-0032).

Regarding claims 75,68 Rautila teaches wherein the data is selectively received via the second channel in response to an indicated location being close enough to the mobile device such that the data can be transmitted to the mobile device via the second channel associated with the close-enough channel (para. # 0024-0025, 0030-0032).

Regarding claims 76 and 78 Rautila teaches wherein the data is selectively received via the first channel in response to all indicated locations being far enough

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from the mobile device such that the data cannot be transmitted to the mobile device via any of the second channel (para. # 0024-0025, 0030-0032).

Regarding claim 77 Rautila teaches a method of data transfer between a mobile device and a communications network via a first narrow bandwidth long-range channel, the network including plural second wideband width short-range channels at different locations, the method comprising (fig. 1);

transferring a message to the device from the network via the first channel, the message indicating that data is desired to be transferred to the device providing a user of the mobile device with an indication of at least one of the different locations (para. # 0024-0025, 0030-0032);

causing the mobile device to be close enough to one of the provided locations to enable the mobile device to receive a message via the second channel associated with the location and transferring data to the device from the network via the channel associated with the location (para. # 0024-0025, 0030-0032).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 31,33,63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boyle et al (6665711) and further in view of Esmailzadeh (20040203626).

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6. Regarding claim 31 Boyle et al teaches apparatus for transferring data from a network to a mobile device comprising (fig. 2):

a transmitter arrangement having differing narrow (204) and wide bandwidths (206) for transmitting data from the network (208) to the mobile device (106) (col.3, lines 31-45, col.), lines 55-67);

the transmitter arrangement being arranged for notifying the mobile device (106) of data awaiting transfer thereto from the network (208) via the first, lower bandwidth (204) (col.2, lines 21-34, col. 7, lines 44-55); and

the transmitter arrangement being arranged for transferring the data to the mobile device (106) via the wide bandwidth (206) (col. 2, lines 50-62, col. 8, lines 11-16). Boyle et al teaches accepting an update notification generated by a server computer in a proxy server (114), where the notifications may be push notifications or pull notifications. The notification is queued in the proxy server and a client update notification is formed to comply with characteristics of a wireless network. The notification is delivered to a particular wireless client across the wireless network. While Boyle et al teaches all the element of the claimed invention, Boyle et al does not specifically teach scheduling arrangement feature (as applicant's Arguments).

On the other hand, Esmailzadeh teaches scheduling arrangement feature (para. # 0016). When the data showing the detected code is included in the data transmitted by the station to the terminals, the data-transmitting schedule is read out from the moving terminals. The terminals then transmit data to the station based on the indicated schedule. Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to modify the device of Boyle et al by specifically adding feature scheduling arrangement improves the data transfer in the communication device as taught by Esmailzadeh.

Regarding claim 33 Boyle et al teaches a method of data transfer by using first and second communication links of differing bandwidths between a network and a mobile device, the first link having a narrower bandwidth than the second link, the method comprising (fig. 2):

notifying the mobile device of data awaiting transfer thereto from the network by transmitting a first signal from the network to the device via the first link (col.2, lines 21-34, col. 7, lines 44-55); and

then transferring the data from the network to the mobile device by transmitting a second signal from the network to the device via the second link (col. 2, lines 50-62, col. 8, lines 11-16). Boyle et al teaches accepting an update notification generated by a server computer in a proxy server (114), where the notifications may be push notifications or pull notifications. The notification is queued in the proxy server and a client update notification is formed to comply with characteristics of a wireless network. The notification is delivered to a particular wireless client across the wireless network. While Boyle et al teaches all the element of the claimed invention, Boyle et al does not specifically teach scheduling arrangement feature (as applicant's Arguments).

On the other hand, Esmailzadeh teaches scheduling arrangement feature (para. # 0016). When the data showing the detected code is included in the data transmitted by the station to the terminals, the data-transmitting schedule is read out from the moving

terminals. The terminals then transmit data to the station based on the indicated schedule. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Boyle et al by specifically adding feature scheduling arrangement improves the data transfer in the communication device as taught by Esmailzadeh.

Regarding claim 63 Boyle et al teaches a method of transferring data between a mobile device arrangement and a network arrangement via first and second communications links between the device arrangement and network arrangement, the first and second links respectively having narrow and wide bandwidths, the method comprising (fig. 2): sending a first narrow bandwidth signal from a first of the arrangements to the second of the arrangements via the first link (col.2, lines 21-34, col. 7, lines 44-55), the first signal indicating that the first arrangement is ready to transmit data to the second arrangement (col.2, lines 21-34, col. 7, lines 44-55), then sending a second wide bandwidth signal from the first arrangement to the second arrangement via the second link, the second signal including the data (col. 2, lines 50-62, col. 8, lines 11-16). Boyle et al teaches accepting an update notification generated by a server computer in a proxy server (114), where the notifications may be push notifications or pull notifications. The notification is queued in the proxy server and a client update notification is formed to comply with characteristics of a wireless network. The notification is delivered to a particular wireless client across the wireless network. While Boyle et al teaches all the element of the claimed invention, Boyle et al does not specifically teach scheduling arrangement feature (as applicant's Arguments).

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On the other hand, Esmailzadeh teaches scheduling arrangement feature (para. # 0016). When the data showing the detected code is included in the data transmitted by the station to the terminals, the data-transmitting schedule is read out from the moving terminals. The terminals then transmit data to the station based on the indicated schedule. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Boyle et al by specifically adding feature scheduling arrangement improves the data transfer in the communication device as taught by Esmailzadeh.

Claims 35-45,47,67,69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boyle et al (6665711) and further in view of Esmailzadeh (20040203626) and Rautila (20040171378).

Regarding claims 35-45,47,67,69 Boyle et al teaches accepting an update notification generated by a server computer in a proxy server (114), where the notifications may be push notifications or pull notifications. The notification is queued in the proxy server and a client update notification is formed to comply with characteristics of a wireless network. The notification is delivered to a particular wireless client across the wireless network. While Boyle et al teaches all the element of the claimed invention, Boyle et al does not specifically teach scheduling arrangement feature (as applicant's Arguments).

On the other hand, Esmailzadeh teaches scheduling arrangement feature (para. # 0016). When the data showing the detected code is included in the data transmitted by the station to the terminals, the data-transmitting schedule is read out from the

moving terminals. The terminals then transmit data to the station based on the indicated schedule. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Boyle et al by specifically adding feature scheduling arrangement improves the data transfer in the communication device as taught by Esmailzadeh. Boyle et al teaches all the element of the claimed invention, Boyle et al and Esmailzadeh do not specifically teach executed by software, short range (unlicensed), transferring a decryption key from the network to the mobile device via the first link; and then transferring the data in encrypted form, based on the key, from the network to the mobile device via the second communication link. On the other hand, Rautila teaches executed by software, short range (unlicensed), transferring a decryption key from the network to the mobile device via the first link; and then transferring the data in encrypted form, based on the key, from the network to the mobile device via the second communication link (para. # 0024-0025, 0030-0032). The method involves accessing an electronic shop server and ordering a digital product from the server using a mobile device with cellular phone capability. A hotspot network location is identified where the digital product may be downloaded into the mobile device using a short-range transceiver embedded in the mobile device. The mobile device detects a low power radio frequency signal generated by the hotspot network location. The digital product is downloaded into the mobile device by the hotspot network location transmitting the digital product using the low power radio frequency signal to the short-range transceiver of the mobile device. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify

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the device of Boyle et al and Esmailzadeh by specifically adding feature executed by software, short range (unlicensed), transferring a decryption key from the network to the mobile device via the first link; and then transferring the data in encrypted form, based on the key, transfer of digital data to a mobile devices taught by Rautila.

7. Claim 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boyle et al (6665711) and further in view of Esmailzadeh (20040203626) and Aho et al (6198941).

Regarding claim 46 Boyle et al Esmailzadeh do not specifically teach GPS.

In an analogous art, Aho et al teaches determining the location of at least one of the mobile devices and a base station of the second communication link by using GPS (col. 6, lines 12-26). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Boyle et al and Esmailzadeh by specifically adding feature, Improves data transfer in the communication device as taught by Aho et al.

8. Claims 60,61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rautila (20040171378) and further in view of Aho et al (6198941).

Regarding claims 60,61 Rautila does not specifically teach GPS.

In an analogous art, Aho et al teaches determining the location of at least one of the mobile device and a base station of the second communication link by using GPS (col. 6, lines 12-26). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Rautila by

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specifically adding feature, Improves data transfer in the communication device as taught by Aho et al.

Response to Arguments

9. Applicant's arguments with respect to claim 31,33,35-47,52-56,60-61,63,67-78 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHAWAR IQBAL whose telephone number is 703-306-3015.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **BANKS-HAROLD, MARSHA**, can be reached at 703-305-4379.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:


(703) 872-9314 (for Technology Center 2684 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Khawar Iqbal


RAFAEL PÉREZ-GUTIÉRREZ
PATENT EXAMINER
4/4/05